

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
Marshall Division

INTELLECTUAL VENTURES II LLC,)	
)	
Plaintiff,)	Civil Action No. 2:16-cv-00980-JRG
)	
v.)	JURY TRIAL DEMANDED
)	
FEDEX CORP., FEDERAL EXPRESS)	
CORP., FEDEX GROUND PACKAGE)	
SYSTEM, INC., FEDEX FREIGHT,)	
INC., FEDEX CUSTOM CRITICAL)	
INC., FEDEX OFFICE AND PRINT)	
SERVICES, INC., and GENCO)	
DISTRIBUTION SYSTEM, INC.,)	
)	
Defendants.)	
)	

PLAINTIFF INTELLECTUAL VENTURES'
REPLY CLAIM CONSTRUCTION BRIEF

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ARGUMENT

A. '900 Patent

1. “mobile field unit” (term 1) & “a system having an enterprise computing system and at least one mobile field unit” (term 2)

The abstract, summary of the invention, and every single example in the '900 patent explain that the mobile field unit communicates over a wireless network. (Dkt. No. 91, 3.) And contemporaneous extrinsic definitions agree that such a “mobile” device communicates wirelessly. (*Id.*) FedEx disputes none of this. (Dkt. No. 102, 3.) Nevertheless, FedEx surmises—without any support—that the wireless network “is just an embodiment” and summarily concludes that the “mobile field unit” need not communicate wirelessly. (*Id.*) Rather than support its conclusory assertion, FedEx asks the Court to adopt the PTAB’s preliminary claim construction. (*Id.*) Putting aside the fact that the PTAB’s construction is preliminary and based on a different standard (broadest reasonable interpretation), it also is based on the PTAB’s erroneous and irrelevant suggestion that a wireless **modem** is optional for the mobile field unit.¹ Whether or not a “modem” is required, there is no dispute that the mobile field unit must communicate some way over the wireless network—which is precisely IV’s construction. And there is no example or suggestion anywhere in the '900 patent that the wireless network is optional.

While wireless communication is fundamental to the '900 patent, the same cannot be said for HTML or “nonproprietary code.” The importance of wireless communication appears in the abstract (which mentions wireless networks or communication in *every sentence*), the summary of the invention (Ex. A, 2:24-34), and the introductory paragraph of the detailed description (*id.*, 3:38-42).

¹ The PTAB suggested that “modem” was optional because “[m]obile field unit 72 **may** also comprise wireless radio modem 74.” (Dkt. No. 102-1, 8-9 (citing Ex. A, 4:14-34).) But the next paragraph explicitly identifies the **optional** components of the mobile field unit: “Mobile field unit 52 **optionally** may comprise a wireless two-way **voice communication device 76.**” (Ex. A, 4:30-34.)

But those explanations of the core features of the invention never mention HTML, and HTML only appears for the first time in column 8—after the *39th* mention of “mobile field unit.” (*Id.*, 8:1.)

FedEx’s entire argument is premised wrongly on its assertion that the ’900 patent disparages “proprietary systems” and labels HTML-based user interfaces as “in accordance with the present invention.” (Dkt. No. 102, 1-2.) First, far from disparaging proprietary systems, the specification describes them as “useful,” while noting the “need for more advanced two way data communication.” (Ex. A, 2:5-7.) Indeed, the patent merely recommends that a new system *should*—not *must*—use “non-proprietary technologies,” while equally recommending that the system be “easily maintained.” (Ex. A, 2:16-17); *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1366 (Fed. Cir. 2012) (“Mere criticism … is not sufficient to rise to the level of clear disavowal. . . . [E]ven where a particular structure makes it ‘particularly difficult’ to obtain certain benefits of the claimed invention, this does not rise to the level of disavowal of the structure.”). Second, the ’900 patent never equates HTML or nonproprietary code with “the invention.” Nor do the cases FedEx cites hold that the phrase “in accordance with the invention” magically turns everything that follows into a claim limitation. *See Mobile Telecomms. Techs., LLC v. T-Mobile USA, Inc.*, 78 F. Supp. 3d 634, 653 (E.D. Tex. 2015). If they did, 15 of the 18 figures of the ’900 patent would be incorporated into every claim, because those figures are described as “in accordance with the present invention.” (Ex. A, 2:45-3:30.) Third, nothing FedEx cites *disclaims* the use of non-HTML or proprietary code. The applicants only said that propriety code is not necessary—far from a disclaimer. *See Grantley Patent Holdings, Ltd. v. Clear Channel Commc’ns, Inc.*, No. 9:06-cv-259, 2008 WL 112119, at *9 (E.D. Tex. Jan. 8, 2008) (finding the specification’s “optimum” limitation was not “required or necessary”). Finally, the dependent claims’ explicit recitation of HTML further evidences that the inventors knew how to claim HTML, but chose not to in claim 1.

2. “field crew” (term 3) & “in response to field crew input” (term 5)

FedEx does not dispute that every step in claim 1 can be performed by a one-person field crew. (Dkt. No. 91, 4; Dkt. No. 102, 4-5.) Nor does FedEx contend that the specification defines a field crew as more than one person. (*Id.*) Instead, FedEx relies entirely on (1) dictionary definitions that have nothing to do with the specification, and (2) its false dichotomy that “field crew” and “field crew member” must have different numbers of people. First, as IV explained in its opening brief (Dkt. No. 91, 4-5), “[s]imply because a claim uses a term in a singular—or plural—form does not necessarily mean that the claim should be construed literally based on those singular or plural forms.” *Lodsys, LLC v. Brother Int'l Corp.*, No. 2:11-00090, 2013 WL 2949959, at *17 (E.D. Tex. June 14, 2013). Instead, “[w]hether a singular form of a term in a claim precludes the plural, or *vice versa*, frequently depends on how a term is used in context, as well as what the specification discloses.” *Id.*, *18. FedEx never addresses this, because, as it tacitly concedes, nothing in the patent requires a multi-person field crew. Second, the patent uses “field crew” and “field crew member” to distinguish when one member is *required* (“field crew member”), from when one or more members may be involved (“field crew”). *Cf. Blue Calypso, Inc. v. Groupon, Inc.*, 93 F. Supp. 3d 575, 601 (E.D. Tex. 2015) (finding “set” can be a collection of one or more).

With term 5, FedEx further demonstrates the problem with its “field crew” construction by taking it to its absurd extreme. Starting with its premise that “field crew” requires multiple people, FedEx proposes that field crew input means *multiple* people must type on the mobile field unit to input a *single* field crew login. The patent never suggests that result, and it should be rejected.

3. “work order assignment data” (term 4)

FedEx offers no reason to limit the term to data *describing* the work order or to eliminate the concept of “assignment” from the term. (Dkt. No. 102, 5-6.) Figure 10, which FedEx cited and

which depicts an example of work order assignments, demonstrates that the work order assignment data is simply data *associated with* and not necessarily *describing* the work order assignment.

4. “verifying field crew identity” (term 6) & “retrieving detailed assignment data” (term 8)

Neither “verifying” nor “retrieving” must occur at the enterprise computing system. For “verifying,” FedEx cites a paragraph (9:30-43) and figure (Fig. 7) that are simply the same procedure set out in dependent claim 3. (*Compare* Ex. A, cl. 3, *with* 9:30-43 *and* Fig. 7.) And claim 3 explicitly says that all three of the steps (including those performed on the mobile field unit) are part of “verifying field crew identity.” (*Id.*, 15:38-40.) Moreover, FedEx does not identify any language in the specification disclaiming “verifying” being performed on the mobile field unit.

For “retrieving,” FedEx again identifies no language disclaiming (or imposing) a location of the assignment data before it is retrieved and makes the same error regarding the dependent claims. And IV did not disclaim retrieval from the mobile field unit during IPR. Instead, IV explained that “retrieving” required the data be *retrieved* from somewhere (such as the enterprise computing system or local memory), but could not be *generated in real time* (and thus “retrieved” from nowhere), as in the prior art. (Dkt. No. 102-7, 15-16.) Finally, as FedEx concedes, the “‘detailed assignment data’ . . . is detailed data regarding the assignment that a field crew *may* be working on.” (Ex. A, 11:31-33). The field crew need not be working on the assignment before it is retrieved.

B. ’356 Patent

1. “entity” (as used in terms 9, 10, 11)

Contrary to FedEx’s suggestion, an “entity” is not required to act like a human. (Dkt. No. 102, 8.) In one embodiment, the entity has some human qualities, such as the ability to move objects or input information. But in other embodiments, the entity is passive: it is not responsible for moving an object and instead only is *connected* with such movement—e.g., something else moves

the entity. (Ex. B, 2:64-67, “A system and method for associating the movement of goods with the identity of an individual or other entity **responsible for or connected with such movement** is described.”).) Similarly, while some claims require the entity to use an input device (e.g., claims 20, 33, 51), others do not (e.g., claims 1, 35). Moreover, the patent’s use of the phrase “entity (*i.e.*, human or robot)” does not alter the meaning of “entity,” because the phrase only is used in the context of embodiments in which entities **do** act like humans. (Ex. B, 3:7-12 (describing entity as a person or robot in “one embodiment”); 4:34-36 (same); 4:67-5:4 (same).) Here, “*i.e.*” is exemplary, rather than definitional, because interpreting otherwise would exclude the “passive” entity embodiments described above and create internal inconsistency with the invention summary, which describes an entity as “an individual or automated device.” (*Id.*, 1:66-2:4); *e.g.*, *DealerTrack, Inc. v. Huber*, 674 F.3d 1315, 1326 (Fed. Cir. 2012) (interpreting “*i.e.*” as exemplary when deeming it definitional would read out embodiments or create internal inconsistency).

2. “controlled space” (as used in terms 9, 11)

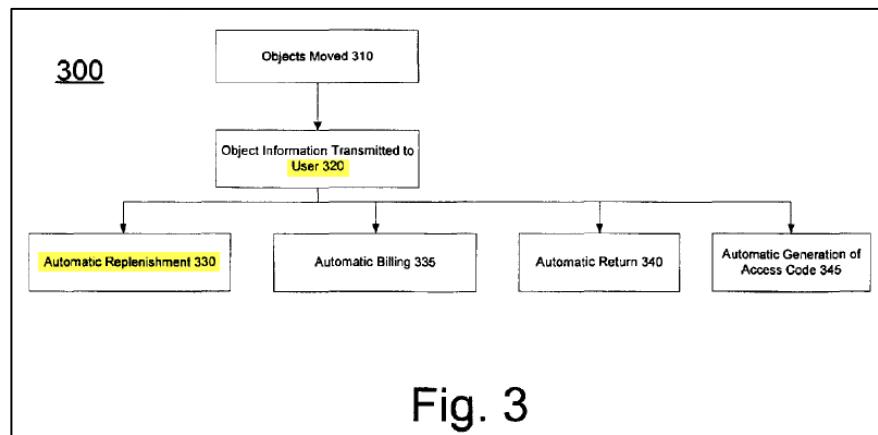
FedEx’s principal argument—that unauthorized access to a controlled space is discussed only in the context of locking mechanisms—is demonstrably false. (Dkt. No. 102, 10.) Indeed, the very first paragraph of the invention summary describes monitoring (e.g., recording and reporting) “unauthorized accesses to a controlled space.” (Ex. B, 2:4-6.) It does not mention a locking mechanism or other method of “controlling” the access to the claimed **controlled space**. Only later, in an entirely separate paragraph that begins with the phrase “[i]n one embodiment . . . ,” does the patent discuss some embodiments that include a locking mechanism. (*Id.*, 2:7-20.) Moreover, FedEx’s proposal—which requires a “mechanism” limiting unauthorized access—is inconsistent with the doctrine of claim differentiation. Dependent claim 2, adds to claim 1 a “mechanism” to limit access to a controlled space and a “controller.” Thus, “controlled space” by itself (which appears in claim 1) is presumed to require neither a “mechanism” nor a “controller,” and FedEx

offers no reason to ignore that presumption. FedEx's reliance on IV's IPR response is confusing: The quoted excerpt demonstrates IV's consistent position that the invention is about monitoring access to a space, not locking it down. (Dkt. No. 102, 9; Dkt. No. 102-9, 18.) FedEx musters no reason why "controlled space" should exclude the examples of controlled spaces that allow unauthorized access to the space and monitor the access. (E.g., Ex. B, 2:3-5.)

3. "automatically" (as used in terms 11, 12)

The specification uses "automatically" abundantly (Dkt. No. 91, 7), yet FedEx identifies just one example that allegedly shows that the patentee intended to exclude all human involvement from all "automatic" actions. (Dkt. No. 102, 11 (citing Ex. B, 4:33-40).) Even that one example—contrasting "automatic input" versus input with a keyboard barcode scanner—does not support FedEx's construction because using that scanner may require human decision-making or control, action that also is excluded from FedEx's construction. (*Id.*) FedEx offers nothing else from the intrinsic record to support eliminating *all* possibility of human involvement.

In fact, the '356 patent and its file history expressly contemplate "automatic" actions that have human involvement. In contrast to the examples specifying that a "computer" or a "server" must perform the automatic steps, the specification explains that in the example depicted in Figure 3, the "*user may take steps*" to perform step 330, which is "*automatic* replenishment." (Ex. B, Fig. 3 (shown here), 7:12-13; *see also*, e.g., *id.*, 3:20-29 ("providing this information to ... individuals [who use it to]...automatically replenish stock, ... [and] return objects



to storage areas when necessary"), *id.*, 2:21-35.) Similarly, the provisional application explains that

a “party” (in context, humans) may “**automatically**” replenish (block 330) the objects in inventory.” (Ex. Y, at 13.) Finally, excluding any possibility of human involvement from all “automatic returns or pick-ups” would be inconsistent with inventory control systems in November 2000 (and even today). (Ex. Z.) For at least these reasons, FedEx’s construction should be rejected. *See also e.g., CollegeNet, Inc. v. ApplyYourself, Inc.*, 418 F.3d 1225, 1235-36 (Fed. Cir. 2005) (declining to construe “automatically” as “without human intervention” because patent contemplates certain automatic steps may involve a human); *Vehicle IP, LLC v. Werner Enters., Inc.*, 4 F. Supp. 3d 648, 660-62 (D. Del. 2013) (same); *Medversant Techs., LLC v. Morrissey Assocs. Inc.*, No. 09-cv-5031, Dkt. No. 247, 28 (C.D. Cal. Aug. 5, 2011) (same).

4. “notifying the user of whether or not the addition, removal, return, defective status, or movement of the objects is authorized or not” (term 13)

FedEx demands that the authorization status of an event must be included with *every notification* sent, but that creates an additional requirement that does not appear in claim 4. Claim 4 depends from claims 1 and 3. Claim 3 narrows claim 1 by adding an additional step: “further *comprising* notifying the user of [an event].” Claim 4 narrows claim 3 by adding yet *another* step: notifying the user of whether the event was authorized or not. That claim does not require that the notification occurs with “every notification” sent, it just creates an *additional* notification. Thus, the step is not improperly “optional”; if the step does not occur, the claim is not infringed.²

5. The remainder of the language in terms 9, 10, 11

Term 9: The ’356 patent demonstrates that an entity’s identity information may be obtained upon entry *or* later, e.g., during an event. (Ex. B, 3:17-25; *also compare* claim 1 (which requires

² *In re Johnston and Pfizer, Inc. v. Ranbaxy Labs, Ltd.* are inapposite. In *Johnston*, the dependent claims used permissive language, 435 F.3d 1381 (Fed. Cir. 2006), and in *Pfizer*, the dependent claim at issue was directed to non-overlapping subject matter, 457 F.3d 1284 (Fed. Cir. 2006).

“obtaining identity information regarding an entity which enters a controlled space”) *with* claim 20 (which requires identifying the entity “attempting to enter the controlled-access location”.)

Term 10: “Close proximity tracking system” is ambiguous (as to “close”) and inaccurately characterizes the ’356 patent’s “wireless tracking systems,” which include “sophisticated systems [used] to track objects” incorporating “PDAs” and “wireless devices.” (Ex. B, 1:21-28.) Just because the ’356 patent does not explicitly list “GPS” does not mean GPS cannot be part of the recited “wireless tracking system.” As the ’581 patent (filed 3 months before the ’356 patent) demonstrates, GPS was a known feature of PDAs at the time the ’356 patent was filed, and as FedEx recognizes, PDAs are specifically listed in the ’581 patent. (E.g., Ex. D, 2:10-19.) And contrary to FedEx’s assertion, a jury would not be left “guessing” as to what an “object” is.

Term 11: FedEx’s proposed language construing “associating” and “status information” would neither assist a jury (because they know what those terms mean) nor resolve any disputes.

C. ’715 Patent

1. “successive” (and the remainder of terms 14, 15)

“Uninterrupted” never appears in the ’715 patent, yet FedEx seeks to limit the asserted claims to an “uninterrupted sequence of points” on the basis of a single dictionary entry that equally supports IV’s intrinsic-evidence-based proposed construction. (Dkt. No. 102-18 (defining successive as “following one another in order”)). Moreover, FedEx’s proposed constructions of “**several** successive points of [a/the] business process” and “each tag at each successive point” improperly read out the word “several” from claims 1, 9 and 11. Claim 1 is a “method for tracking tags at **several** successive points of a business process,” claim 9 depends from claim 1, and claim 11 is a “system for tracking tags at **several** successive points of a business process.” By injecting the idea that tag reading is continuous at all points of a business process, FedEx’s proposals essentially require substituting “continuous,” “all,” or “every” for the word “several,” which is not supported by

the intrinsic record or the plain meaning of “several.” And contrary to FedEx’s assertion, “each successive point” does not mean “every one of the points along the uninterrupted sequence of points.” “Each point” relates to each of the “several successive points” referred to in the preamble; and that requires no further elaboration. In contrast, IV’s proposed construction for “successive” (and proposal to apply plain and ordinary meaning to the rest of terms 14 and 15) allows all of the words of claims 1, 9, and 11 to retain meaning, consistent with proper claim construction principles and the specification.

2. “populating . . .” (and the remainder of term 16)

Nothing in the ’715 patent (or IV’s technology tutorial) demands that an entire database be completely empty when it is being “populated.” The only example FedEx provides is Table 1, which is an illustration of “a data *structure* according to *one embodiment*” of the invention. (Ex. C, 4:48:62.) That table is not intended to illustrate an entire *database* or show that the database must be empty when populated. Rather, it simply is intended to show the *structure* of the database of one embodiment of the invention. Moreover, FedEx’s citations of the abstract and Tables 1-7 say nothing about “populating” a “database”—never mind populating a *database that previously contained no data*—but instead are designed to show the structures of an exemplary database. Finally, a person of ordinary skill reading the ’715 patent would not need an “example” or a “description” of a database to know that FedEx’s construction is incompatible with the reality of using the patented invention. According to FedEx’s proposed construction, a company tracking RFID tags would need to host thousands of databases in order to constantly populate empty databases. That is an absurd result and shows that FedEx’s proposed construction must be wrong.

3. Terms 17, 18, 19, 20

FedEx admits that terms 17, 18, 19, and 20 can be understood on their face, but asks the Court to adopt FedEx’s proposals for those terms, which restrict all terms relating to “information”

(e.g., “modifying information,” “using modified information,” “other information”) to “information relating to missed data reads.” But the specification demonstrates that “information” in the claims is not so limited. As the patent itself explains, the invention “tracks tags at several successive points and uses the tracking information to control a business process, such as a product supply chain.” (Ex. C, 1:7-15.) The invention can be used to track missed tag reads (a tag read that did not occur) or “misreads” (a tag read with *incorrect* information). (E.g., Ex. C, 7:10-23; *see also* 7:67-8:60.) For example, the patent describes tracking the path (the locations) of boxes, pallets, and individual items through the supply chain. (*Id.*, 8:6-60.) The patent teaches tracking “*information* about the product, *including the intended destination of the product.*” (*Id.*, 8:22-31.) If a tag is detected in an unexpected location, the patent teaches that the database can be modified to “indicate a new destination of the product” or the product can be re-routed to the appropriate place. (*Id.*) Thus, FedEx’s claims that the patent only teaches tracking and modifying information about “missed reads” is false, and its proposed constructions for terms 17-20 should be rejected.

4. Term 22

In context, “tool” is not a “nonce term,” as IV already explained in its opening brief. The alleged function supplies any required algorithm: modifying database information *as a function* of other stored information and using that information to track a tag. But if the Court disagrees, IV’s proposed structure is correct. FedEx’s proposed structure suffers from the same defect as its proposals for terms 17-20: “information” is not limited to “missed reads of the particular tag by the particular reader.” And FedEx’s proposed structure is not language that appears in the specification; FedEx simply rewrites the specification to fit its overly narrow view of the claimed invention.

D. ’581 Patent

1. “access an assessment program” (term 25)

FedEx's proposal prevents an "assessment program" from accessing data in a database. That is inconsistent with the intrinsic record—including all statements made in the file history—and the commonly understood meaning of "program." (Dkt. No. 91, 10.) IV agrees that the applicants distinguished between accessing an "assessment program" and accessing a "database storing data" during prosecution. (Exs. L, M.) But that statement says nothing about how the assessment program functions. Critically, the applicants never disclaimed an assessment program that accesses or contains a database. Instead, the applicants clarified that an assessment program itself is more than just a database, consistent with IV's proposal. (*Id.*) Moreover, the patent claims recite using the assessment program to render and/or provide analysis of collected field data. (E.g., Ex. D, 7:63-8:8; cl. 2.) To do that, the program must access or contain a database.

2. Term 30

IV amended its proposed structure to resolve some of the parties' dispute. (See Ex. BB.) FedEx agrees that the '581 patent discloses an algorithm for a client program on a handheld device. (See Dkt. No. 102, 23-24; *see also* Ex. D, 3:58-67, 7:1-49, 7:57-63, 8:40-53, 10:52-64, 11:41-52, 12:15-20, 12:27-31, Figs. 6, 9, 11, 13.) But FedEx does not (and cannot) justify importing the term's function into its proposed corresponding structure. IV maintains that "accessing a program" does not require construction, but to the extent one is required, the function should be construed in accordance with IV's proposal for term 25. (Dkt. No. 91, 12.)

3. Remaining means-plus-function terms (terms 31 & 33-37)

FedEx's own statements contradict its (new) argument that terms 31 and 33-37 are indefinite. FedEx already cited extensive intrinsic evidence to support its proposed structures for terms 31 and 33-37, without ever referencing some alleged inadequacy. (See, e.g., Dkt. No. 82-3, 41 (citing, among other sections, 7:50-13:24, and each of the '581 patent's figures in support of term 31).) In any event, the '581 patent includes ample structure and algorithms.

Term 31: FedEx does not explain why additional limitations relating to where the program is stored—which are not present in the claim or in corresponding claim 1—should be added to the recited function of term 31. (*Compare* claim 1, *with* claim 18.) And IV does not ignore the “algorithm” requirement. IV’s and FedEx’s proposals are nearly identical. IV’s structure includes each industry-specific field data management software program, which contain directly linked algorithms for achieving term 31’s function. (*See, e.g.*, Ex. D, Figs. 7-13.)

Terms 33, 35: IV amended its proposals for terms 33 and 35 to resolve some of the disputes. (*See* Ex. BB.) IV is not broadening terms 33 and 35 by ignoring the “algorithm” requirement. IV already identified the directly linked computer program instructions as described in Figs. 13 and 9 and accompanying references in the specification for terms 33 and 35, respectively. FedEx agrees that Fig. 13 and accompanying references disclose the required algorithm for the agreed-upon function. But FedEx’s structure is incomplete. As IV already explained, a skilled artisan would know that one could use Figure 13’s algorithm with the other field data management software disclosed in the patent, *e.g.*, that in Figs. 8 and 9. *E.g., Ibormeith IP, LLC v. Mercedes-Benz USA, LLC*, 732 F.3d 1376, 1379 (Fed. Cir. 2013) (“[A] recited algorithm...need not be so particularized as to eliminate the need for any implementation choices by a skilled artisan; but it must be sufficiently defined to render the bounds of the claim . . . understandable by the implementer.”).

Term 34: FedEx incorrectly omits mapping programs that the patent amply describes. (*E.g.*, Ex. D, 2:13-18, 6:51-67, 8:4-12, 8:40-44, 8:64-66, 10:28-30, 12:17-20, Figs. 5, 7, 13, claims 7, 16.)

Terms 36, 37: IV amended its proposed structure to include the specific client software examples detailed in the patent for performing the agreed-upon function to try to streamline the parties’ dispute. (Ex. BB.) FedEx’s proposed structure improperly omits the algorithms disclosed in Figures 9 and 11 and accompanying references in the specification. For Figure 9, device-server

synchronization (901) and updated instruction created by server (904) are directly linked means for “providing data to the server” and “retrieving enhanced data from the server.” (*See* Ex. D, Fig. 9; *see also* *id.*, 10:45-11:12.) For Figure 11, synchronize schedule with inventory manager (1103) and obtain product/part consistent with schedule (1105) are directly linked means for “providing data to the server” and “retrieving enhanced data from the server.” (*See* *id.*, Fig. 11; *see also* *id.*, 11:41-52.)

4. “handheld device” (term 24)³

FedEx concedes that the plain meaning of the term “requires that it is capable of being held in a user’s hand,”⁴ but then offers a completely different construction that would force a jury to discern what it means to “substantially” “fit within the palm” of an unspecified user’s hand. (Dkt. No. 120, 22.) FedEx does not address why those added ambiguities are appropriate or what they mean. Moreover, IV’s IPR response cannot be interpreted as limiting “handheld device” beyond its plain and ordinary meaning. In that response, IV explained why the portability of a handheld device was important to the claimed invention to distinguish over prior art that required using a peripheral device to collect data. (Dkt. No. 102-28, 13-15.) It had nothing to do with a user’s palm.

5. “download a field management program” (term 26)

FedEx advocates applying an alleged prosecution history disclaimer (for “assessment program”) to a different claim term (“field management program”) but never explains why it should apply. Nor does FedEx address the different claim language applicant elected to use while prosecuting claims 1 and 7. (Ex. D, cl. 1 (reciting “assessment program,” “assessing”), cl. 7 (reciting “field management program,” “downloading”); *see also* Exs. L, M.)

³ IV cannot discern why this term should be construed. Anyone who has had a FedEx package delivered has seen the accused instrumentalities operated while being held by the driver, using his/her hand. And FedEx’s own documents (along with those of the device suppliers) refer to the devices as “handheld devices.” (*See, e.g.*, Exs. AA1-4.)

⁴ More correctly, it should be capable of being held *by* a user with his/her hand.

6. “position module” (term 27) / “communication module” (term 28)

FedEx does not explain why it did not inform the PTAB that terms 27 and 28 should be governed by § 112(6) in IPR2017-00729, as was required if those terms were subject to § 112(6). (Dkt. No. 91, 27.) Nor does FedEx explain why “**position** module” and “**communication** module” are “nonce words.” (*Id.*) Indeed, those modifiers change the meaning of “module” to convey sufficiently definite structure (as the specification demonstrates). *See Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1351 (Fed. Cir. 2015) (“the presence of modifiers can change the meaning of ‘module’”); *Blast Motion, Inc. v. Zapp Labs, Inc.*, No. 15-cv-00700, 2017 WL 476428, at *17 (S.D. Cal. Feb. 6, 2017) (“communication module” is not a means-plus-function term because it “contains sufficient structure in itself and as supported by the specification”).

E. ’586 Patent

1. “data tag(s)” (term 41)

FedEx’s proposed construction restricts “data tag” to a markup language, reading the preferred embodiment out of the claims. “Such an interpretation is rarely, if ever, correct and would require highly persuasive evidentiary support, which is wholly absent in this case.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996). Indeed, every example in the specification includes “function key tags” (e.g., F01, F02) or alphabetical data tags (e.g., “DAB,” “DAC”), neither of which is associated with a markup language or included in FedEx’s proposal. (*See also* Ex. E, cls. 1-6 (reciting XML data tags), 7-19 (not claiming XML data tags).)

To reach its result, FedEx relies entirely on a single prosecution history statement directed to a different claim term, in an unrelated claim, in a parent application. This is a quintessential case where “unclear prosecution history cannot be used to limit claims.” *Cordis Corp. v. Boston Sci. Corp.*, 561 F.3d 1319, 1329 (Fed. Cir. 2009). First, the statement applies to “tagged” rather than “data tag.” *See SimpleAir, Inc. v. Google, Inc.*, No. 2:13-cv-0937, 2015 WL 1906016, at *12 (E.D.

Tex. Apr. 27, 2015) (finding no disclaimer where the prosecution history did not use the actual claim term). Indeed, in the unrelated claim at issue, “data tags” were only one component of the larger term “tagged bar coded information.” (Dkt. No. 102-30, 2.) Second, the distinction the applicants drew from the prior art had nothing to do with whether “data tag” was in a markup language. (Dkt. No. 102-30, 5-6.) Moreover, FedEx inaccurately imports “a field with” into the construction when those words describe the *field* that a tag accompanies, not the tag itself. “DAB” is a “sequence of characters,” consistent with IV’s construction, not a “*field with* a sequence of characters.”

2. “an identifier identifying one of the data items” (term 43)

FedEx acknowledges that “an identifier identifying one of the data items” must be characters “within a data tag that identif[y] one of the data items,” consistent with IV’s construction. (Dkt. No. 102, 30.) But the word “additional” in FedEx’s proposed construction is contradictory: the sequence of characters that make up the identifier cannot be both “within the data tag” and also “additional” to the data tag’s sequence of characters.

3. “means for receiving an electronic document comprising a plurality of bar codes” (term 47)

A “means for receiving an electronic document comprising a plurality of bar codes” requires a computer that “accesses” a library (or hard drive), email, or an internet web page on a web server, not one that “opens” an electronic document. FedEx’s proposed structure improperly equates “receiving” with “opening” even though the patent distinguishes the two. (Ex. E, 5:10-15 (receiver first receives an electronic document via a library or email and then opens it).) FedEx compounds this problem by conflating “receiving . . . bar coded data” with “receiving an electronic document” (*see* Dkt. No. 102, 35-36), even though the patent demonstrates that they are not the same. In fact, the specification demonstrates that the bar coded data is only “received” after the bar code is scanned (Ex. E, 5:18-19), which is a part of the means for decoding, a separate aspect of the invention. And

contrary to FedEx’s assertion, IV’s proposed structure does not require three separate computers—rather, the patent discloses *alternative* structures to perform the means for receiving. *E.g., Serrano v. Telular Corp.*, 111 F.3d 1578, 1583 (Fed. Cir. 1997) (“Disclosed structure includes that which is described in a patent specification, including any alternative structures identified.”).

4. “means for decoding the plurality of bar codes to recover the respective data tags and data items” (term 48)

The function of this claim element is “decoding,” and the algorithm for performing that function is scanning, parsing, and data caching. No more specific algorithm is required to perform the claimed function. The cases FedEx cites instead stand for the now unremarkable proposition that a general purpose computer is insufficient—a construction neither party suggests.

If the Court, however, determines that a “parsing and data cache application” requires a further algorithm, IV’s alternative proposed structure (in Exhibit BB, attached) is consistent with the full scope of the term. FedEx’s proposed structure improperly narrows the term to require “another electronic document,” even though the ’586 patent explicitly recites embodiments in which the stripped bar coded data is input into an “applicable software application” instead. (*Compare* Ex. E, 5:40-48, *with* 5:57-67; *see also, e.g., id.*, 6:1-3 (“All the steps described ... apply to the alternate embodiment of the present invention.”), 1:26-27 (“inputting the bar coded information into *a variety of applications*”), 3:20-28, 3:37-47, 4:39-49.) U.S. Patent No. 7,070,103, incorporated by reference, confirms IV’s position. (Ex. N, 3:35-36 (“a decoder which transforms the scanned bar code into data which may be manipulated *in a variety of ways* by a host device”); 4:35-41; 5:65-6:2 (describing inputting data “through a variety of commonly available software applications”).)

5. “operations for data interchange” / “data interchange” (term 38)

By adding extra language to the preamble, FedEx’s proposal renders the “sending” and “means for receiving” elements of the claims redundant, and therefore must be rejected.

6. “creating an electronic document” (term 39) / “electronic document having [or comprising] a plurality of bar codes” (term 40)

FedEx’s proposals for terms 40 (*i.e.*, requiring that an electronic document be created by software using bar code fonts) and 39 (*i.e.*, requiring that an electronic document be created using a markup language style sheet) are irreconcilable, and neither is correct. “Creating” is neither limited to “using a markup language style sheet to generate” nor generating by “software using bar code fonts.” The patent explicitly describes creating an electronic document *without* using a style sheet. (Ex. E, 5:49-53 (“[I]f the decision is made that electronic documents . . . do not require a style sheet, . . .”).) And FedEx’s proposal for term 39 demonstrates that FedEx already recognizes that “creating” is not limited to software using bar code fonts.

Notwithstanding the inconsistencies, FedEx’s proposal for term 40 suffers from two additional flaws: (a) “electronic document” was not expressly defined, and (b) it impermissibly defines the “electronic document” by how it is purportedly created, not what it is. FedEx’s argument that applicants expressly defined the term “electronic document” is belied by the first two words of the very passage FedEx cites: “An example . . .” (Ex. E, 4:65.) Use of “[i]n the present invention” is not a talisman that converts an example into a claim limitation. *Absolute Software, Inc. v. Stealth Signal, Inc.*, 659 F.3d 1121, 1136 (Fed. Cir. 2011). And FedEx provides no legal support for its proposal to construe this term according to how it is allegedly created rather than what it is. *AFG Indus. v. Cardinal IG Co.*, 224 F. App’x 956, 958 (Fed. Cir. 2007) (“[P]roduct claims generally are not limited by how the product is produced.”).

7. “wherein the plurality of bar codes encode respective data tags and data items” (term 42)

“Respective” does not mean “different,” and FedEx supplies no support for that substitution. The word “respective” was added when the claims were amended to include a “plurality” of bar codes (Dkt No. 102-36, 4), and a plain reading of “respective” demonstrates that each data tag is

encoded in the same bar code as its associated data item. Nothing precludes two different bar codes from encoding the same data tag and data item, especially given the patent discloses real-world bar codes that encode multiple data tags and data items. (E.g., Ex. E, Figs. 5, 8 (data format for a two-dimensional ANSI bar code); 6:4-7 (data format for two-dimensional GM bar code).)

8. “sending the electronic document” (term 44)

FedEx now proposes limiting the broad term “sending” to just one method: “e-mailing.” (Dkt. No. 102, 36.) But applicants chose “sending,” not “e-mailing.” Applicants’ identification of “e-mailing” as support in a provisional application for “sending” was not a disclaimer, which requires a clear and unmistakable disavowal of claim scope. *Cordis*, 561 F.3d at 1329.

9. “decoding of a first one of the plurality of bar codes to recover a first data tag and a first data item” (term 45)

A skilled artisan would understand that decoding bar coded data turns it into human readable form. The Court should reject FedEx’s attempts to limit this term to a specific decoding method because the claim in which it appears is not so limited.

10. “data field associated with one of the data tags” (term 49)

In Figure 5, “LAST NAME” is not a sequence of characters representing the data field—it *is* the data field; each data item (e.g., “Smith”) tagged with a corresponding data tag (e.g., “F01” or “DAB”) is a last name. (Ex. E, Figs. 2-9.) FedEx’s proposal implies that a sequence of characters (e.g., L-A-S-T-N-A-M-E) is meaningful or must be encoded into a bar code, but claim 18 only requires that the *electronic document* includes a data field associated with one of the data tags.

CONCLUSION

For the foregoing reasons and those in IV’s opening brief, IV respectfully requests that this Court adopt its proposed constructions of the disputed claim terms when constructions are necessary.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing document was filed electronically in compliance with Local Rule CV-5(a). As such, this document was served on all counsel who are deemed to have consented to electronic service. Local Rule CV-5(a)(3)(A). Pursuant to Fed. R. Civ. P. 5(d) and Local Rule CV-5(d) and (e), all other counsel of record not deemed to have consented to electronic service were served with a true and correct copy of the foregoing by email, on this the 11th day of September 2017.

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